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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HOLLINGTON, JERMELE M

ART UNIT PAPER NUMBER

2829

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,448

Applicant(s)

TRAN ET AL.

Examiner

Jermele M. Hollington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-14 is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/3/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 14-15 of copending Application No. 10/323,503. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to include external trigger input with each of the test and measurement instrument of the this application since the both instrument in this case include in Fig. 1 a trigger circuit inside the instrument.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is the relationship between both applications: claim 1 of this application is similar to claim 1 of U.S. Application No. 10/323,503 and claim 4 of this application is similar to claims 14 and 15 of U.S. Application No. 10/323,503.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2-3, the claims state; "...said first and second test and measurement instruments having respective transceivers..." Claim 3 depends from claim 2, in which claim 2 depends from claim 1. In claim 1, it states: "...said test and measurement instruments is coupled to said circuitry for combining via a cable connecting a respective pair of transceivers..." It is clear from claim 1 that the test and measurement instruments having transceivers. It appears that the transceivers are located within the circuitry, which is coupled to the test and measurement instruments.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Tan et al (6812688).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

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102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Tan et al disclose [see Fig. 1] a system for triggering a plurality of test and measurement instruments (acquisition units 120₁ and 120₂) substantially simultaneously, comprising: a first test and measurement instrument (acquisition unit 120₁) having a first input (left side of 120) for receiving a signal under test (DATA1), an output (right side of 120) for developing a trigger enable signal (AS₁), and an input (bottom of 120) for receiving a combined trigger signal (T), a second test and measurement instrument (acquisition unit 120₂) having a first input (left side of 120) for receiving a signal under test (DATA2), an output (right side of 120) for developing a trigger enable signal (AS₂), and an input (bottom of 120) for receiving a combined trigger signal (T), and circuitry (combination of processing and display unit 130 and trigger circuit 140) for logically combining said trigger enable signals (AS1 and AS2) of said first and second test and measurement instruments (120₁ and 120₂) to generate said combined trigger signal (T), wherein each of said test and measurement instruments (120₁ and 120₂) is coupled to said circuitry (130 and 140) for combining via a cable connecting a respective pair of transceivers (combination of 132, 134, 136 and 138), and said trigger enable signal (AS1 and AS2) and said combined trigger signal (T) are conveyed in mutually opposite directions through said cable; and said first and second test and measurement instruments (120₁ and 120₂) acquire data samples (DATA1 and DATA2) of said signals under test (DATA1 and DATA2) in response to said combined trigger signal (T).

Regarding claim 2, Tan et al disclose said transceivers (132, 134, 136 and 138) comprise: a series combination of a variable impedance device (132, 134, 136 and 138), a switch (switch 142) and a constant current source (input unit 160); wherein: said first and second test and measurement instruments (120₁ and 120₂) inherently [see Note below] having respective transceivers in which the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is adapted to effect transmission of at least one of said trigger enabled signal (AS1 and AS2) and said combined trigger signal (T).

[Note: Although the prior art does not specifically disclose the claimed “test and measurement instruments having respective transceivers”, this feature is seen to be an inherent teaching of that device since test and measurement instruments receive DATA signals and trigger signals T as disclosed and it is apparent that some type of transceivers must be presented for the test and measurement instruments to function as intended.]

Regarding claim 3, Tan et al disclose said first and second test and measurement instruments (120₁ and 120₂) inherently [see Note below] having respective transceivers in which the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is monitored to effect reception of at least one of said trigger enabled signal (AS1 And AS2) and said combined trigger signal (T).

[Note: Although the prior art does not specifically disclose the claimed “test and measurement instruments having respective transceivers”, this feature is seen to be an inherent teaching of that device since test and measurement instruments receive DATA signals and trigger signals T as disclosed and it is apparent that some type of transceivers must be presented for the test and measurement instruments to function as intended.]

Regarding claim 4, Tan et al disclose [see Fig. 1] a system comprising: a plurality of signal acquisition devices (acquisition units 120₁ and 120₂), each of said signal acquisition devices (120₁ and 120₂) comprising an event decoder [not number but see col. 2, lines 63-65 and col. 4, lines 7-9], for monitoring at least one respective input signal (DATA1 and DATA2) to

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determine whether a logical triggering event has occurred, and a transceiver (processing and display controller 130), for transmitting an indicium of the occurrence of said logical triggering event and for receiving a trigger signal (AS1 and AS2), and a trigger controller (trigger circuit 140), comprising a plurality of transceivers (144) operative to receive said logical triggering event indicia transmit said trigger signal (T), and a logical processing device (processing controller 130) for combining said logical triggering event (AS1 And AS2) indicia to produce therefrom said trigger signal (T).

Regarding claim 5, Tan et al disclose said transceivers (132, 134, 136 and 138) comprise: a series combination of a variable impedance device (132, 134, 136 and 138), a switch (switch 142) and a constant current source (input unit 160); wherein: the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is adapted to effect transmission of at least one of said trigger enabled signal (AS1 and AS2) and said combined trigger signal (T).

Regarding claim 6, Tan et al disclose the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is monitored to effect reception of said triggering signal (T).

Regarding claim 7, Tan et al disclose said constant energy source (160) comprises a constant current source; and said variable impedance device comprises a transistor (144).

Conclusion

7. Applicant's arguments filed Nov. 3, 2005 have been fully considered but they are not persuasive.

8. a) The applicant states: "Claims 1 and 4 stand rejected under the judicially-created doctrine of obviousness-type double patenting and being unpatentable over claims 1 and 14-15 of copending Application No. 10/323,503. Applicant submits herewith a Terminal Disclaimer under 37 C.F.R. 1.321(c) (copy attached)."

The examiner has double checked all amendments submitted on November 3, 2005 but no Terminal Disclaimer was found in the amendment. Therefore, the examiner will not withdraw the provisional rejection from the last Office Action.

b) The applicant states: "Specifically, it was said in the outstanding Office Action that FIGURE 1 of Tan, et al. ('688) (hereinafter Tan) shows a system for triggering a plurality of test and measurement instruments. However, column 2, lines 47-50, of Tan describe FIGURE 1 as showing "a high level block diagram of a signal acquisition system", specifically, "a digital storage oscilloscope" (emphasis added). That is, FIGURE 1 of Tan shows only a single test and measurement instrument, and teaches nothing about a system comprising multiple test and measurement instruments. Applicants submit that the rejection is based upon a misconception that the terms "acquisition unit" and "signal acquisition system" are synonymous. They are not."

In response to the above arguments, the examiner thinks that the applicant may have misread Tan cols. 2-3. First, the claimed language in claim 1 states: "A system for triggering a plurality of test and measurement instruments..." In col. 2 of Tan, it states that system 100, which is, as stated above, a signal acquisition system. However, this system 100 comprises a first acquisition unit 120₁ and a second acquisition unit 120₂, which examiner uses as the multiple test and measurement instruments. Therefore, the examiner believes the Tan reference still reads on the claimed invention.

c) The applicant states: *"Applicants cannot understand how controller 130 of Tan could possibly be said to be a respective "pair of transceivers". Reference numerals 132 through 134 are functions controlled by a single controller 130. No transceiver at all is shown in FIGURE 1 of Tan."*

In response to the above argument, the examiner does not use controller 130 as "pair of transceivers". In the Office Action, the examiner uses controller 130 as part of the circuitry that is coupled to the test and measurement instruments. It appears to the examiner that circuitry comprises the transceivers, which the examiner uses items 132, 134, 136 and 138. Therefore the examiner believes that Tan reference still reads on the claimed invention.

Since the examiner has not change the prior art used in the Office Action, the following is being applied.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Flakne et al (6219029) and Azinger (6693576) disclose a method and apparatus having multiple test and measurement instruments.

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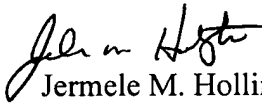
11. Claims 8-14 are allowed.

12. The following is a statement of reasons for the indication of allowable subject matter: regarding claim 8, the reason for the allowance of the claim is due to an apparatus comprising, in combination with other limitations, a terminal for receiving a conductor, said conductor conveying a trigger enable signal and a trigger signal in mutually opposite directions. Since claims 9-14 depend from claim 8, they also have allowable subject matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (517) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jermele M. Hollington
Primary Examiner
Art Unit 2829

JMH
January 17, 2006